GUARDIAN
FALL PROTECTION

PERFORMANCE SAFETY GEAR

GUARDIAN CB ANCHORS

Model Numbers:

00600 00601 00600-SS 00610 00645 00651
00652 00653 00656 00657 00680 00690
10681 10683

USER'S MANUAL

KEEP THIS FOR YOUR RECORDS AND TRAINING PURPOSES!
READ AND UNDERSTAND BEFORE USING EQUIPMENT!

GUARDIAN FALL PROTECTION

PERFORMANCE SAFETY GEAR

TABLE OF CONTENTS:

INTRODUCTION..... Page 2
GENERAL SYSTEM SELECTION CRITERIA..... Page 3
TRAINING REQUIREMENTS..... Page 4
RESCUE PLAN..... Page 4
MAINTENANCE, CLEANING AND STORAGE..... Page 5
INSPECTION..... Page 5
APPLICABLE STANDARDS..... Page 6
LIMITATIONS..... Page 6
SYSTEM REQUIREMENTS..... Page 10
ANCHORAGE STRENGTH..... Page 11
PRIOR TO EACH USE..... Page 12
PLAN YOUR FALL PROTECTION SYSTEM..... Page 12
INSTALLATION GUIDELINES..... Page 13
USER INFORMATION..... Page 18
INSPECTION LOG..... Page 18

INTRODUCTION:

Thank you for purchasing this Guardian Fall Protection equipment. This manual should be read and understood in its entirety and used as part of a training program as required by OSHA, ANSI, CSA or any applicable state regulatory agency.

This and any other included instructions must be made available to the users of the equipment. The user must understand proper equipment use and limitations.

This manual covers the maintenance and use of equipment made and sold by Guardian Fall Protection. See supplemental material for specific installation instructions.

GUARDIAN FALL PROTECTION

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WARNING!

- DO NOT alter the equipment.
- DO NOT misuse the equipment.
- DO NOT use combinations of components or subsystems that may affect or interfere with the safe, compatible function of each other.
- DO NOT expose the equipment to chemicals that may produce a harmful effect or degrade the equipment. Consult manufacturer in cases where doubt exists.
- DO NOT use the equipment around moving machinery or electrical hazards unless specifically designed for such use.
- DO NOT use the equipment around sharp edges or abrasive surfaces unless intended for such use.

GENERAL SYSTEM SELECTION CRITERIA:

Selection of fall protection shall be made by a Competent Person*. All fall protection equipment shall be purchased new and unused.

The equipment is designed for use as a part of a personal fall protection system. Components shall not be used for any other operation other than that which it has been designed and approved for.

Consult a doctor if there is any reason to doubt a user's ability to withstand and safely absorb fall arrest forces or perform setup of equipment. Age, fitness and health conditions can seriously affect the worker should a fall occur. Pregnant women and minors should not use this equipment.

*ANSI Z359.0 2.27 defines a Competent Person as, "An individual designated by the employer to be responsible for the immediate supervision, implementation, and monitoring of the employer's managed fall protection program who, through training and knowledge, is capable of identifying, evaluating, and addressing existing and potential fall hazards, and who has the employer's authority to take prompt corrective action with regard to such hazards."

TRAINING REQUIREMENTS:

The employer must ensure that each employee who might be exposed to fall hazards has been trained by a Competent or Qualified Person*. The training program must include the following:

- The ability to recognize the hazards of falling
- The procedures to be followed in order to minimize these hazards
- All relevant Federal, State and local regulatory requirements, procedures and standards
- Correct erecting, maintaining, disassembling and inspection of the fall protection systems being used
- Use of personal fall arrest systems

*ANSI Z359.0 2.109 defines a Qualified Person as, "A person with a recognized degree or professional certificate and with extensive knowledge, training, and experience in the fall protection and rescue field who is capable of designing, analyzing, evaluating and specifying fall protection and rescue systems to the extent required by this standard.

RESCUE PLAN:

OSHA 1926.502(d)(20) states "The employer shall provide for prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves." The rescue plan shall be project specific. Employees shall be trained in self-rescue or alternate means shall be provided for prompt rescue in the event of a fall.

IMPORTANT!
EQUIPMENT SUBJECTED TO THE FORCES OF A FALL MUST BE REMOVED FROM SERVICE IMMEDIATELY.

MAINTENANCE, CLEANING, AND STORAGE:

- Repairs to Guardian Equipment can be made only by a Guardian representative or entity authorized by Guardian. Contact Guardian for maintenance and repair.
- Cleaning after use is important for maintaining the safety and life of the equipment.
- Cleanse the equipment of all dirt, corrosives and contaminants.
- If equipment cannot simply be wiped clean use a mild soap and water, rinse, wipe to dry.
- OSHA, ANSI and CSA require that equipment is stored in a manner as to preclude damage from environmental factors such as heat, light, excessive moisture, oil, chemicals and their vapors or other degrading elements.

INSPECTION:

- Before each use, the worker must inspect all fall protection equipment.
- A formal inspection must be made by a Competent or Qualified Person other than the user at least every six months. Record the results of these inspections in the Inspectio n Log in the back of this manual.
- Visually inspect all components of the equipment looking for signs of corrosion, cracks, deformation and other damage.

WARNING!

IF GUARDIAN EQUIPMENT DOES NOT PASS INSPECTION, REMOVE FROM SERVICE IMMEDIATELY.

GUARDIAN FALL PROTECTION
PERFORMANCE SAFETY GEAR

IMPORTANT!
DO NOT HANG EQUIPMENT, RIGGING OR STAGING FROM FALL PROTECTION ANCHOR POINTS.

APPLICABLE STANDARDS:

This product is designed to comply with OSHA, ANSI and CSA standards when used properly in accordance with manufacturer's instructions. Standards might include OSHA regulations, depending on the type of work being done and also might include state regulations if applicable. Consult regulatory agencies for more information on personal fall arrest systems and associated components.

LIMITATIONS:

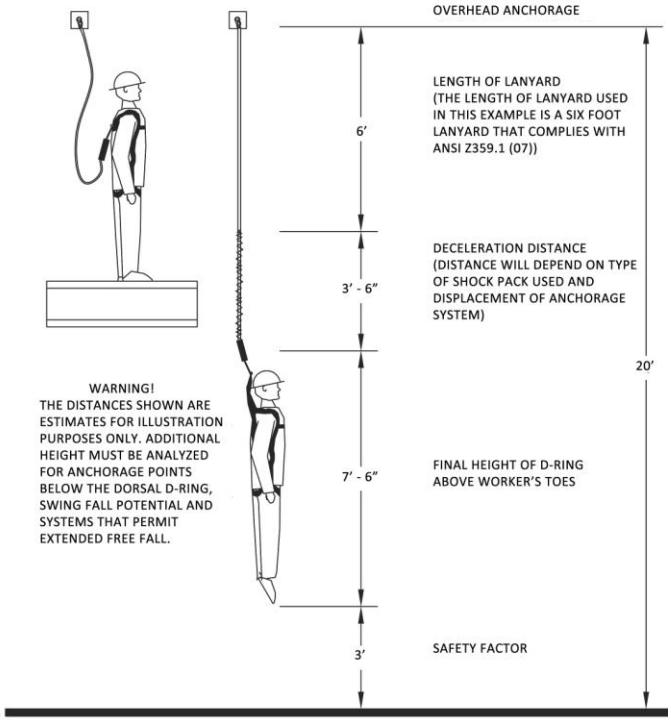
Consider the following application limitations before using this equipment.

- CAPACITY: Guardian equipment is designed for use by persons with a combined weight (clothing, tools, etc.) of no more than 310 lbs. using an approved connecting system. No more than one personal protective system may be connected at one time . If you require a combined weight of 310 lbs.-400 lbs., please contact Guardian for alternatives.
- FREE FALL: Personal Fall Arrest Systems (PFAS) used with this equipment must be rigged to limit the freefall to six (6) feet as called out in ANSI Z359.1. Free fall can be further with a connected subsystem designed for extended free fall. Only Qualified Persons and personnel trained on the proper use of fall protection such as this anchor are allowed to use this product.

LIMITATIONS continued:

- FALL CLEARANCE: There must be sufficient clearance below the user to arrest a fall before the user strikes the ground or any other obstruction. A hazard assessment by a trained and Competent Person is recommended before any work is started that would include the use of fall protection.

- FALL ARREST DISTANCE: Consult the image below to help determine your total fall arrest distance.



LIMITATIONS continued:

- SWING FALLS: Swing falls occur when the anchorage point is not directly above the point where a fall occurs. The force of striking an object in a swing fall may cause serious injury or death. Do NOT permit swing falls as injuries could occur. Swing falls will significantly increase the clearance required when a self retracting lifeline or other variable length connecting system is used. The free fall from a swing fall must not be more than four feet per ANSI Z359.6-2009 5.3 Swing Falls.

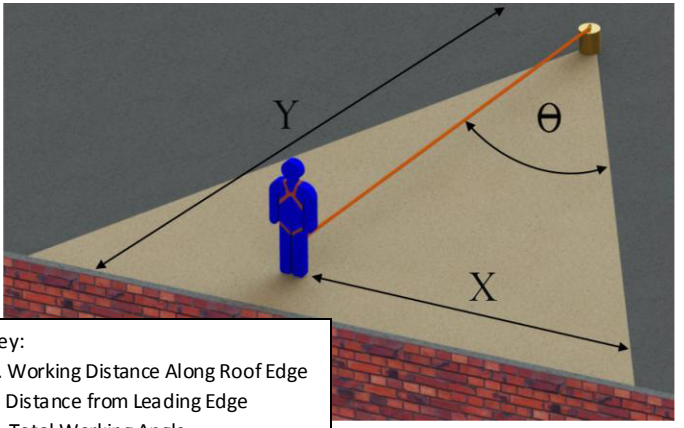
- POTENTIAL ENVIRONMENTAL HAZARDS: Use of fall protection equipment in areas with environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include but are not limited to chemicals, corrosive environments, high voltage power lines, gases, moving machinery and sharp edges.

WARNING!

SNAPHOOKS AND CARABINERS MUST BE SELF-CLOSING AND SELF-LOCKING. THEY MUST WITHSTAND A 5,000 LBS. LOAD. THE GATE OF THE SNAPHOOK OR CARABINER MUST WITHSTAND A 3,600 LBS. SIDE LOAD. FOR MORE INFORMATION SEE ANSI 359.12-2009 3.1.1.3

LIMITATIONS continued:

- CORRECT ANCHORAGE POSITIONING: Consult the chart and diagram below to determine the safe angles from which you can work when tied off to a single anchor point.



Key:
X. Working Distance Along Roof Edge
Y. Distance from Leading Edge
Θ. Total Working Angle

SINGLE ANCHOR POINTS

Note: This chart details allowable working zones for swing fall based on ANSI Z359.6-2009:
5.3 Swing Falls. In fall arrest systems, anchorages shall be located directly above the worker(s) to eliminate swing falls, wherever it is reasonably practical to do so. Where it is not reasonably practical to prevent swing falls, the swing-drop distance shall not exceed 4.0 ft (1.22m).

Distance from Leading Edge (Y)	Working Distance Along Roof Edge (Either Direction) (X)	Working Angle From Perpindicular (θ)
6'	8'	53 Degrees
10'	9'-9"	45 Degrees
15'	11'-7"	38 Degrees
20'	13'-3"	33 Degrees
25'	14'-8"	30 Degrees
30'	16'	28 Degrees
35'	17'-2"	26 Degrees
40'	18'-3"	24 Degrees
45'	19'-4"	23 Degrees
50'	19'-10"	21 Degrees
55'	21'-4"	21 Degrees
60'	22'-3"	21 Degrees

SYSTEM REQUIREMENTS:

- COMPATIBILITY OF COMPONENTS: Guardian Fall Protection equipment is designed to be used with Guardian approved components. Please contact Guardian if you have a question regarding compatibility. Making substitutions without approval from Guardian may lead to injuries and/or death by compromising the safety and reliability of the complete system. A Qualified Person can make a determination on compatibility of equipment from different manufacturers.

- COMPATIBILITY OF CONNECTORS: Connectors (D-Rings, hooks, carabiners) must be capable of supporting at least 5,000 lbs. Non-compatible connectors may unintentionally disengage. Self-locking and self-closing snap hooks and carabiners are required by ANSI and OSHA. Connectors must be compatible in size, shape, and strength.

- MAKING CONNECTIONS: Only use self-closing, double-locking snaphooks and carabiners that are compliant to ANSI Z359.12 with any Guardian equipment. Make only compatible connections. If you have any questions on compatibility, please call Guardian.

ANCHORAGE STRENGTH REQUIREMENT:

The anchorage strength required is dependent on the application. Ensure that any anchorage point used in the personal fall protection system meets the following requirements.

- FALL ARREST: The structure to which the anchorage connector is attached must sustain static loads applied in the directions permitted by the fall arrest system of at least 3,600 lbs. with the certification of a Qualified Person, or 5,000 lbs. without certification. Refer to OSHA and ANSI for specific definition. This anchor is to be used by one worker only unless otherwise determined by a Qualified Person or manufacturer. If an HLL system is being used, follow manufacturer's instructions and specifications. Anchorages used for attachment of a personal fall arrest system shall be independent of any anchorage being used to support or suspend platforms. Maximum permissible free fall is six feet.
- RESTRAINT: The structure to which the anchor point is attached must sustain static loads applied in the directions permitted by the restraint system or at least 3,000 lbs. Free fall must be restricted to two feet or less.
- WORK POSITIONING: The structure to which the anchor point is attached must sustain static loads applied in the directions permitted by the work positioning system of at least 3,000 lbs., or twice the potential impact load, whichever is greater. Free fall must be restricted to two feet or less.
- RESCUE: The structure to which the anchor point is attached must sustain static loads of at least 3,000 lbs., or twice the potential impact load, whichever is greater. NO VERTICAL FREE FALL IS PERMITTED.

PRIOR TO EACH USE:

In accordance with ANSI standards, the requirements below must be followed:

- Fall protection equipment shall be inspected by the user for defects, damage and deterioration.
- Any suspected defective equipment shall be removed from service.
- If the manufacturer's label is not legible or is missing, the equipment shall be removed from service.
- If it is necessary to remove Guardian equipment during a portion of a particular job, make sure to re-secure the equipment before resuming work.

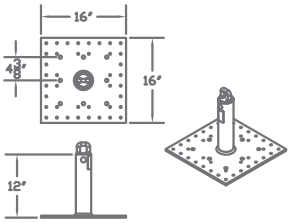
PLAN YOUR FALL PROTECTION SYSTEM:

Before installation, plan your system. Consider all factors that will affect your safety during use of this equipment. The following list gives important points to consider:

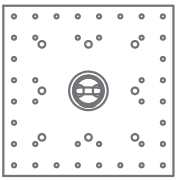
- ANCHORAGE: Select a rigid anchorage capable of supporting loads of no less than 5,000 lbs. without certification and 3,600 lbs. with certification from a Qualified Person.
- SHARP EDGES: Avoid working where system components may be in contact with, or abrade against unprotected sharp edges.
- AFTER A FALL: Components which have been subjected to the forces of arresting a fall MUST be removed from service.
- RESCUE: OSHA requires that the employer have a site specific rescue plan when using this equipment. The employer must have the ability to perform a rescue quickly and safely.

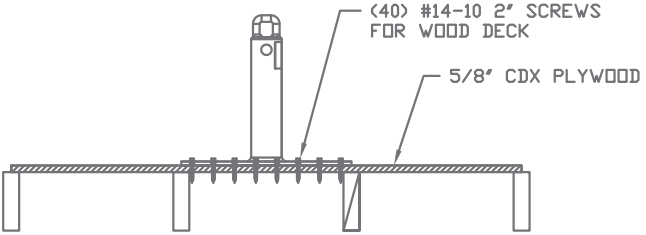
INSTALLATION GUIDELINES

CB-12 INSTALLATION INSTRUCTIONS (WOOD DECK)



ANCHOR DETAIL





NOTES:

1. THE ANCHOR AND PLYWOOD MUST BE INSTALLED TO A STRUCTURE CAPABLE OF RESISTING A 5,000 LB. ULTIMATE LOAD.
2. NECESSARY DECK REINFORCEMENT MAY INCLUDE BUT IS NOT LIMITED TO USING AN OVERLAY SHEET OF ADDITIONAL PLYWOOD, LOCATING JOISTS UNDER ANCHOR PLATE EDGES, AND APPLYING ADDITIONAL FASTENERS FOR THE PLYWOOD TO JOIST CONNECTION.
3. THE DECK USED FOR ANCHOR ATTACHMENT SHOULD BE INSPECTED FOR SIGNS OF ROT OR DECAY PRIOR TO INSTALLATION. ANCHORS SHALL NOT BE INSTALLED ON ANY ROOF STRUCTURE WITH SIGNS OF DECAY THAT MAY COMPROMISE THE WITHDRAWAL CAPACITIES OF THE ROOF DECK SCREWS.

ANCHOR NOTES:

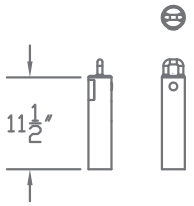
1. GUARDIAN FALL PROTECTION FALL PROTECTION ANCHORAGES ARE DESIGNED TO BE USED WITH ANSI Z359.1 APPROVED FALL PROTECTION EQUIPMENT.
2. FALL PROTECTION ANCHORAGES ARE DESIGNED FOR AN ULTIMATE LOAD OF 5,000 LBS. WITHOUT FRACTURE OR DETACHMENT. CONTACT A GUARDIAN FALL PROTECTION REPRESENTATIVE FOR CERTIFICATION TO USE AS A WINDOW WASHING TIE-BACK ANCHOR.
3. GUARDIAN FALL PROTECTION DESIGNS THE ANCHOR TO STRUCTURE CONNECTION. THE ABILITY OF THE STRUCTURE TO WITHSTAND THE DESIGN LOADS IS TO BE CHECKED BY OTHERS.

GUARDIAN FALL PROTECTION
26609 79th AVE SOUTH
KENT, WA 98032
(800) 466-6385
WWW.GUARDIANFALL.COM

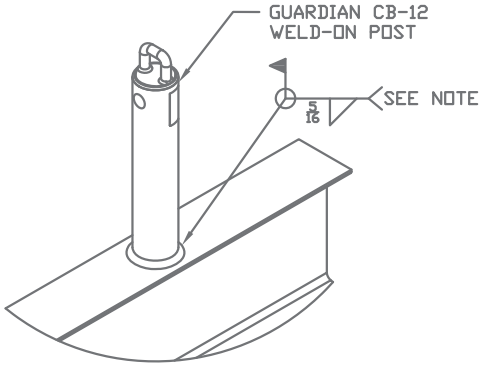
INSTALLATION DETAILS

PRODUCT:	CB-12 FOR WOOD DECK
PART NUMBER:	00645
DATE:	09/23/2011
DRAWN BY:	NAL

CB-12 INSTALLATION INSTRUCTIONS (WELD-ON)



ANCHOR DETAIL



NOTES:
1. WELD CB-12 TO A STRUCTURAL MEMBER CAPABLE OF RESISTING A 5,000 LB. LOAD USING A 5/16" FILLET WELD.
2. ALL WELDING SHALL BE PERFORMED BY AN AWS D1.1 CERTIFIED WELDER USING E-70XX ROD OR WIRE FEED.
3. PREP GALVANIZED AREAS PER AWS D19.0 PRIOR TO WELDING.
4. TOUCH-UP GALVANIZED AREA AFTER WELDING PER ASTM A780.

ANCHOR NOTES:
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3. GUARDIAN FALL PROTECTION DESIGNS THE ANCHOR TO STRUCTURE CONNECTION. THE ABILITY OF THE STRUCTURE TO WITHSTAND THE DESIGN LOADS IS TO BE CHECKED BY OTHERS.

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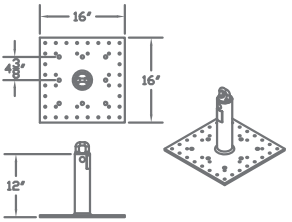
WWW.GUARDIANFALL.COM

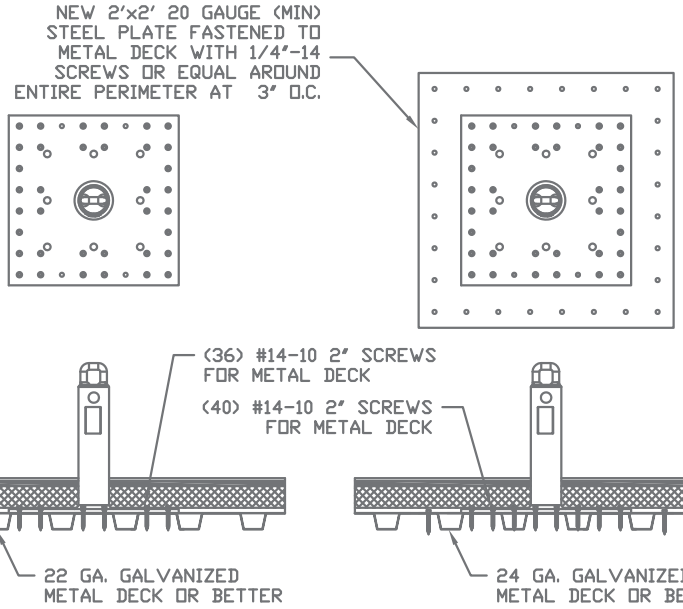
INSTALLATION DETAILS

PRODUCT:	CB-12 WELD-ON POST
PART NUMBER:	10645
DATE:	09/23/2011
DRAWN BY:	NAL

CB-12 INSTALLATION INSTRUCTIONS (METAL DECK)



ANCHOR DETAIL



NOTES:

1. SECURE THE CB-12 ANCHOR TO THE GAGE OF METAL DECKING AS SHOWN OR THICKER.
2. IT IS RECOMMENDED THAT ALL OF THE PROVIDED HOLES IN THE ANCHOR BE USED TO SECURE THE ANCHOR TO THE METAL DECK, BUT THE MINIMUM VALUES SHOWN MUST BE USED.
3. LONGER SCREWS MAY BE REQUIRED IN AREAS WHER A VOID EXISTS UNDER THE PLATE AND A 2" FASTENER CANNOT PENETRATE THE DECKING BY 1/4" OR MORE AFTER INSTALLATION.
4. FASTENERS MUST BE INSTALLED INTO A STRUCTURE THAT IS CAPABLE OF RESISTING A 5,000 LB. ULT. LOAD.

ANCHOR NOTES:

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3. GUARDIAN FALL PROTECTION DESIGNS THE ANCHOR TO STRUCTURE CONNECTION. THE ABILITY OF THE STRUCTURE TO WITHSTAND THE DESIGN LOADS IS TO BE CHECKED BY OTHERS.

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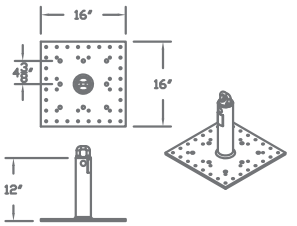
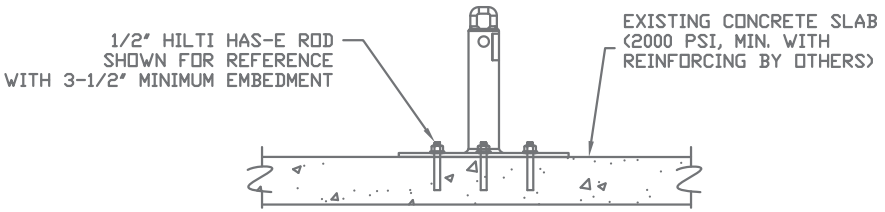
INSTALLATION DETAILS

PRODUCT:	CB-12 FOR METAL DECK
PART NUMBER:	00645
DATE:	09/23/2011
DRAWN BY:	NAL

CB-12 INSTALLATION INSTRUCTIONS (CONCRETE DECK)



ANCHOR DETAIL



NOTES:

1. ANCHOR SHALL BE SECURED TO 2,000 PSI CONCRETE OR BETTER WITH (8) 1/2" DIAMETER ANCHOR BOLTS.
2. HILTI 1/2" HAS-E RODS WITH HILTI HIT HY-150/HIT-ICE IS SHOWN FOR REFERENCE ONLY. USE AN EQUIVALENT OR SUPERIOR SYSTEM WHEN SUBSTITUTING.
3. FOLLOW ALL ANCHOR BOLT MANUFACTURER'S INSTALLATION INSTRUCTIONS REGARDING MINIMUM CONCRETE THICKNESS, TORQUE, WEATHER/TEMPERATURE, AND INSTALLATION PROCEDURE.

ANCHOR NOTES:

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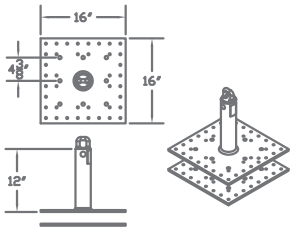
INSTALLATION DETAILS

PRODUCT:	CB-12 FOR CONCRETE
PART NUMBER:	00645
DATE:	09/23/2011
DRAWN BY:	NAL

For installations on other CB products, please contact Guardian Fall Protection

CB-12 INSTALLATION INSTRUCTIONS (WITH BACKER PLATE)



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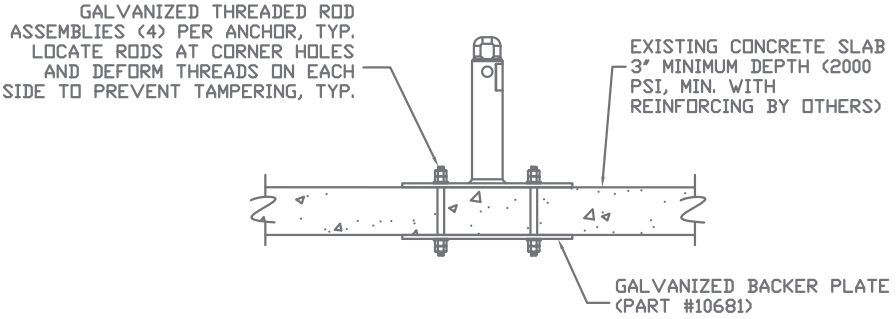
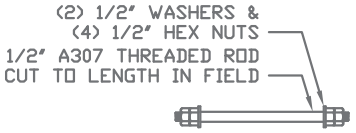
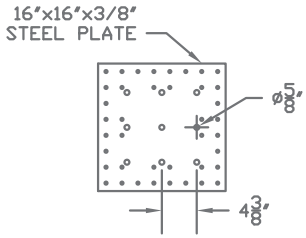




THREADED ROD ASSEMBLY



CB-12 BACKER-PLATE

PART #10681

ANCHOR NOTES:

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KENT, WA 98032
(800) 466-6385
WWW.GUARDIANFALL.COM

INSTALLATION DETAILS

PRODUCT:	CB-12 WITH BACKER PLATE
PART NUMBER:	00645, 10681
DATE:	09/23/2011
DRAWN BY:	NAL

GUARDIAN
FALL PROTECTION
PERFORMANCE SAFETY GEAR

USER INFORMATION:

Date of First Use _____

Serial # _____

Trainer _____

User _____

Please fill out this out and keep for your records.

INSPECTION LOG:

INSPECT EQUIPMENT BEFORE EACH USE. COMPETENT PERSON MUST INSPECT & INITIAL EVERY SIX MONTHS.

Date	Name	Signature

NOTES: _____

SKETCH PROTECTION PLAN SKETCH AREA:

GUARDIAN
FALL PROTECTION
PERFORMANCE SAFETY GEAR

"WE PUT OUR NAME ON THE PRODUCT

BECAUSE YOU

PUT YOUR LIFE ON THE LINE"

Guardian Fall Protection, Inc.

800-466-6385

26609 79th Ave. S.

Kent, WA 98032

www.guardianfall.com